



# **ERP - An Approach to Enterprise Integration in the Department of Defense**

ODUSD (Logistics & Materiel Readiness)  
Logistics Systems Modernization (LSM)  
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# Why Enterprise Integration (EI)?

- DoD goals mandate Enterprise approach
  - WarFighter must be able to:
    - assess and adjust alternative courses of action
    - obtain a network (global) response
  - DoD Leadership must be able to:
    - do cost based resource management
    - maintain resource accountability in a single picture
- COTS applications are preferred approach
  - Accelerates incorporating commercial business practices
  - Reduces the cost and time and risk of process change
- LSM premise: DoD *is* the Enterprise

***Enterprise Resource Planning (ERP) is the predominant commercial enterprise integration solution***



# What is ERP?

- ERP software is a family of computer programs that *instantly access and update* information shared *among business functions* typically including manufacturing, logistics, procurement, finance, and human resources.
- A customer *order entered once* triggers orchestrated actions among all of the resources required to fulfil the order. By linking business functions, *entire processes are automated*.
- The earmarks of a true ERP system are *a common database* and programs, or modules that are *integrated* and therefore can easily talk to each other and share data in real time across multiple business functions.
- ERP systems best *support activity based costing*, providing integrated performance information for operational improvement, strategic learning and accurate measurement of production efficiency and customer fulfillment.

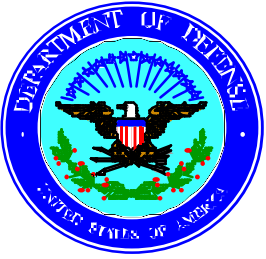


# EI Approaches

- Local “Best of Breed”
- Global “Best of Breed”
- Local ERP
- Global ERP

Analysis shows Global ERP to have best chance of success

*DoD requires **virtual** Global ERP to enable global information management and aggregation*



# Present Challenge

- Logistics related COTS application examples:
  - DLA
    - Business Systems Modernization (SAP)
    - Fuels Automated System (Oracle)
  - Navy
    - 4 ERP pilots (aviation supply/maintenance, ship regional maintenance, working capital fund finance and aviation program management)(SAP)
    - Inventory Management (Lawson)
    - NAVAIR MRP II (Western Data)
  - Army
    - Army Wholesale Logistics Modernization (SAP)
    - Rock Island Arsenal MRP II (CINCOM)
  - TRANSCOM
    - Military Sealift Command (Oracle Financials)
- Mechanism needed to create global view



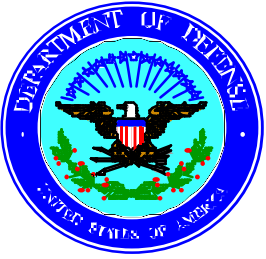
# ERP / EI Success Factors

- Senior Management paves the way
- ERP / EI is a business issue...not IT issue
- Trade “best of breed” for commonality
- Employee retraining / retention critical
- Maximize COTS use / Minimize COTS changes
- Deliver a series of small successes



# Why Leadership Needed

- Logistics IT modernization is big business ... \$3.8B/yr FY01
- DoD total \$19.9B/yr
- ERP/EI implementations will be biggest and most complex IT undertaking in DoD history.
- ERP/EI implementation has been difficult in large commercial organizations, but has succeeded through solid leadership.
- ERP/COTS applications must drive process change...else “paved cow paths”... but DoD emphasizes its uniqueness and has tradition of IT “not invented here.”
- Existing functional and DoD Component structures drive stove-pipe system solutions, impeding collaboration and DoD-wide focus.
- Change is contentious and painful



# Leadership Must

- Create a global view
- Share knowledge
- Seize collaborative efficiencies
- Oversee risk management
- Provide executive sponsorship
- Not stop Component initiative
- Not takeover
- Not create a virtual “big bang”

***Collaboration by all increases each one's chance of success***





# What We Are Doing

- Taking a global view
  - Issuing policy
  - Established consortium
  - Initiating oversight
- Providing EI focus to community data services (DoDD 8190.1)
- Commonly addressing cross-functional interface
- Sharing lessons learned
- Leveraging vendors/integrators
- Obtaining Joint Staff involvement
- Identifying Inter-Component process opportunities

***Just Beginning***

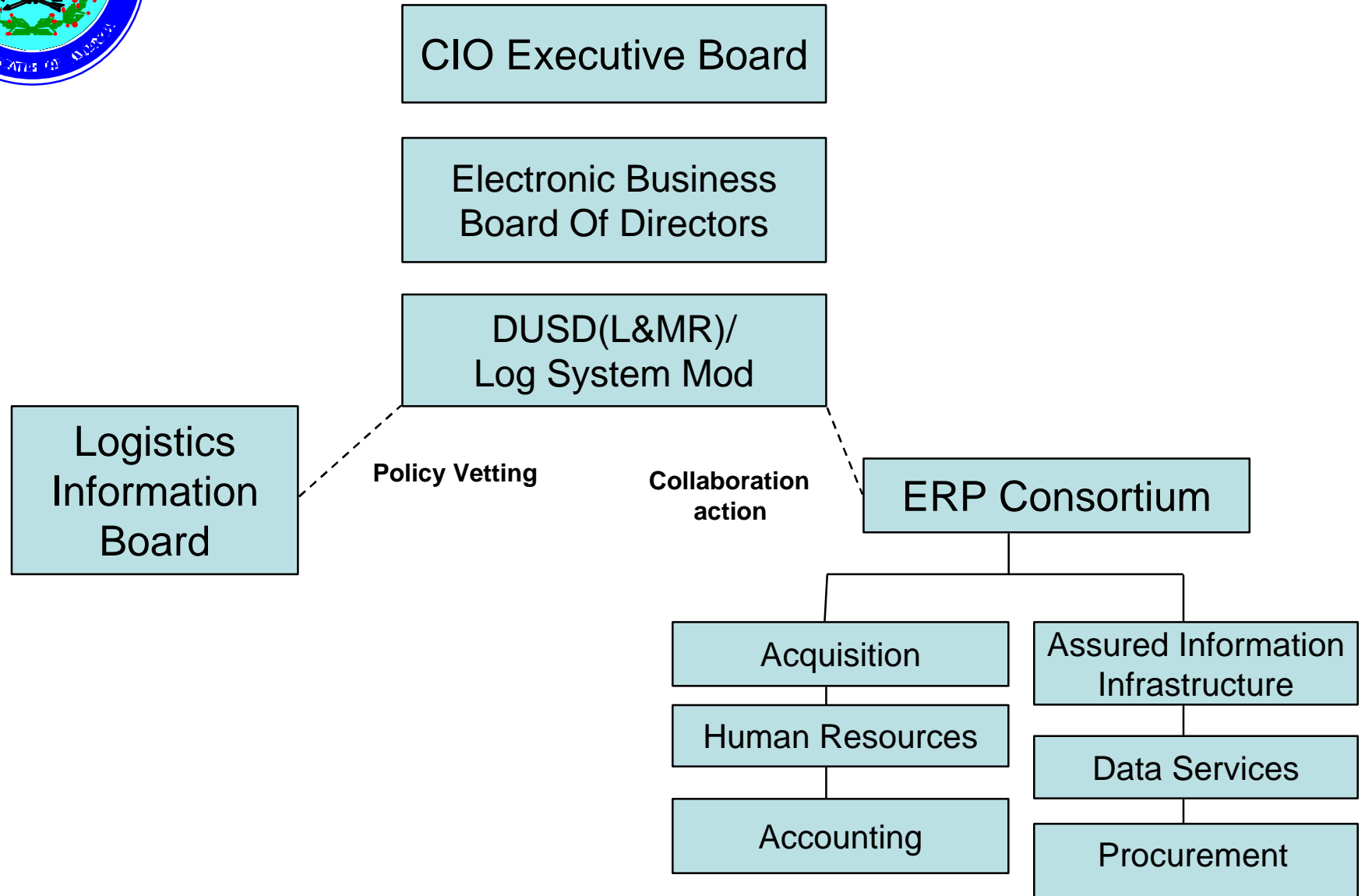


# Draft ERP/EI Tenets

- Champion process changes at highest levels of Component, Function and DoD enterprise.
- Collaboration and Interface
  - Use community services to share vendor-neutral data mappings, interfaces and management metrics and to minimize point-to-point communication.
  - Employ the ERP Consortium to provide a single face from the Logistics community to the enterprise in defining future data and process interchanges.
  - Optimally collaborate when adding functions to commercial or federal software applications
  - Minimize turning off functions in integrated packages solely to accommodate a stovepipe system or organization.
- Change Management
  - Adopt the business process embedded in the commercial package; tailor only for combat advantage or other compelling requirement
  - Only vendors make DoD-driven changes to their source code, pursuant to DoD enterprise brokered deals.
  - Senior Component mission leaders must approve the means by which functionality is added to, or changed from, commercial or federal applications and need visibility of the changes and challenges of moving from current processes to the to-be process.



# Current Organization





# Leadership Must

- ✓ Create a global view
  - ✓ Share knowledge
  - ✓ Seize collaborative efficiencies
  - ✓ Oversee risk management
- Provide executive sponsorship*
- ✓ Not stop Component initiative
  - ✓ Not takeover
  - ✓ Not create a virtual “big bang”

***Engage DoD Board of Directors***



# Conclusion

- DoD is the Enterprise
- Enterprise integration necessary
- High, but manageable, degree of risk with ERP
- Leadership and collaboration required
- Components moving in the right direction
- We have the opportunity to lead ... not recover